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Specializing in  
intellectual property

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USPTO Registered

Sep. 28, 2005

Transmittal Letter

**Commissioner for Patents**  
**PO Box 1450**  
**Alexandria, VA 22313-1450**

**Regarding:**

**Appl. No. 10/666,964 / Filed: Sep. 17, 2003**  
**Title: Method and Apparatus For Solving Bit-Slice Operators**  
**Inventors: Mahesh A. Iyer**  
**Atty. Docket: 06816. 0506CON2**  
**Customer No. 35,795**

Sir:

Applicant submits the following documents for appropriate action by the U.S. Patent and Trademark Office:

1. Certificate of Mailing, signed on Sep. 28, 2005, included on this Transmittal Letter and establishing a filing date of Sep. 28, 2005 for all documents listed on this Transmittal Letter;
2. A Credit Card Payment Form (1 pg) for \$180.00 to cover 37 C.F.R. § 1.17(p) (1 pg);
3. An Information Disclosure Statement (3 pgs);
4. A USPTO Form PTO/SB/08B (1 pg);
5. The eight references listed in the PTO/SB/08B (75 pgs);

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to Deposit Account No. 502584 referencing the above docket number.



Transmittal Letter  
App. No. 10/666,964, filing date 09/17/03  
Sep. 28, 2005  
Page 2 of 2

Respectfully submitted,

*Jonathan T. Kaplan*

Jonathan T. Kaplan (Reg. No. 38,935)

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**CERTIFICATE OF MAILING**

I hereby certify this correspondence is being deposited  
with the U.S. Postal Service on Sep. 28, 2005, with  
sufficient postage as first class mail, in an envelope  
addressed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Person signing this certificate:  
Jonathan T. Kaplan, Reg. No. 38,935

**Signature:**

*Jonathan T. Kaplan*

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Mahesh A. Iyer

Appl. No. 10/666,964

Filed: Sep. 17, 2003

For: **METHOD AND APPARATUS FOR  
SOLVING BIT-SLICE OPERATORS**

Conf. No. 8592

Art Unit: 2184

Examiner: Joseph P. Hirl

Atty. Docket: 06816.0506CON2

Cust. No. 35795

**Information Disclosure Statement**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

The Examiner is requested to consider the documents listed on accompanying Form PTO/SB/08B and make this information of official record in the application.

Applicants have listed publication dates on the attached PTO/SB/08B based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right, with respect to any of the information provided herewith, to prove that this information may not be prior art and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Applicants have checked the appropriate boxes below.

10/05/2005 BABRAHA1 00000043 10666964

01 FC:1806

180.00 OP

- ☐ 1. This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No statement under 37 C.F.R. § 1.97(e) or fee is required, or
- ☒ 2. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection or Notice of Allowance, or action that otherwise closes prosecution in the application, and
  - ☐ a. I hereby state that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(1), or
  - ☐ b. I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2), or
  - ☒ c. Attached is our Credit Card Payment Form to cover the \$180.00 fee under 37 C.F.R. § 1.17(p).

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO/SB/08B, and to indicate in the official file wrapper of this patent application that the documents have been considered.

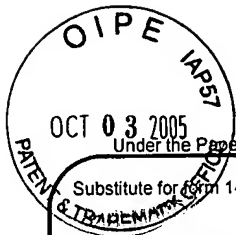
The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 502584 referencing docket number 06816.0110.

Respectfully submitted,

A handwritten signature in cursive script that reads "Jonathan T. Kaplan".

Jonathan T. Kaplan (Reg. No. 38,935)

Date: Sep. 28, 2005  
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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/666,964
Filing Date	Sep. 17, 2003
First Named Inventor	Maresh A. Iyer
Art Unit	2184
Examiner Name	
Attorney Docket Number	06816.0506CON2

Sheet	1	of	1
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**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	1	A. Aharon, A. Bar-David, B. Dorfman, E. Gofman, M. Leibowitz, and V. Schwartzburd, "Verification of the IBM RISC System/6000 by a Dynamic Biased Pseudo-Random Test Program Generator", IBM Systems Journal, Vol. 30, No. 4, 1991, pp. 527-538.	
	2	E. Bin, R. Emek, G. Shurek, and A. Ziv, "Using a Constraint Satisfaction Formulation and Solution Techniques for Random Test Program Generation", IBM Systems Journal, Vol. 41, No. 3, 2002, pp. 386-400.	
	3	A. K. Chandra and V. S. Iyengar, "Constraint Solving for Test Case Generation", Proceedings of International Conference on Computer Design, 1992, pp. 245-248.	
	4	A. K. Chandra, V. S. Iyengar, D. Jameson, R. Jawalekar, I. Nair, B. Rosen, M. Mullen, J. Yoon, R. Armoni, D. Geist, and Y. Wolfsthal, "AVPGEN - A Test Case Generator for Architecture Verification", IEEE Transactions on VLSI Systems, Vol. 3, No. 2, June 1995, pp. 188-200.	
	5	C.-Y. Huang and K.-T. Cheng, "Assertion Checking by Combined Word-level ATPG and Modular Arithmetic Constraint-Solving Techniques", Proceedings of the Design Automation Conference, June 2000.	
	6	M. A. Iyer, "High Time for High-Level ATPG", Panel position statement, Proceedings of the International Test Conference, 1999, pp. 1112.	
	7	W. Kunz, and D. Pradhan, "Recursive Learning: A New Implication Technique for Efficient Solutions to CAD-problems - Test, Verification and Optimization", IEEE Transactions on Computer-Aided Design, Vol. 13, No. 9, September 1994, pp. 1143-1158.	
	8	I. Yuan, K. Shultz, C. Pixley, H. Miller, and A. Aziz, "Modeling Design Constraints and Biasing in Simulation Using BDDs", Proceedings of the International Conference on Computer-Aided Design, November 1999, pp. 584-589.	

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.